WHITEPAPER

Meet the Marker: INSM1

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Insulinoma-associated protein 1 (INSM1), a zinc-finger transcription factor, is a key regulator of neuroendocrine differentiation during development, and has recently emerged as a reliable immunostaining marker with a nuclear staining pattern for the identification of neuroendocrine and neuroepithelial neoplasms.[1,2] Several studies have demonstrated nuclear INSM1 expression in multiple neuroendocrine tumor types, including small cell lung cancers (SCLC), gastrointestinal carcinomas, and cancers of the cervix and prostate.[2] The INSM1 [BLR272L] antibody may be used as part of a panel of IHC studies as an aid in identifying the neuroendocrine tumors expressing the INSM1 protein.

In clinical diagnostics, INSM1 may be used primarily for its diagnostic utility in neuroendocrine tumors. It can serve as a sensitive and specific marker and its expression pattern may help differentiate neuroendocrine tumors from other types of malignancies that may have a similar histological appearance under the microscope, thereby helping with accurate diagnosis.[3]

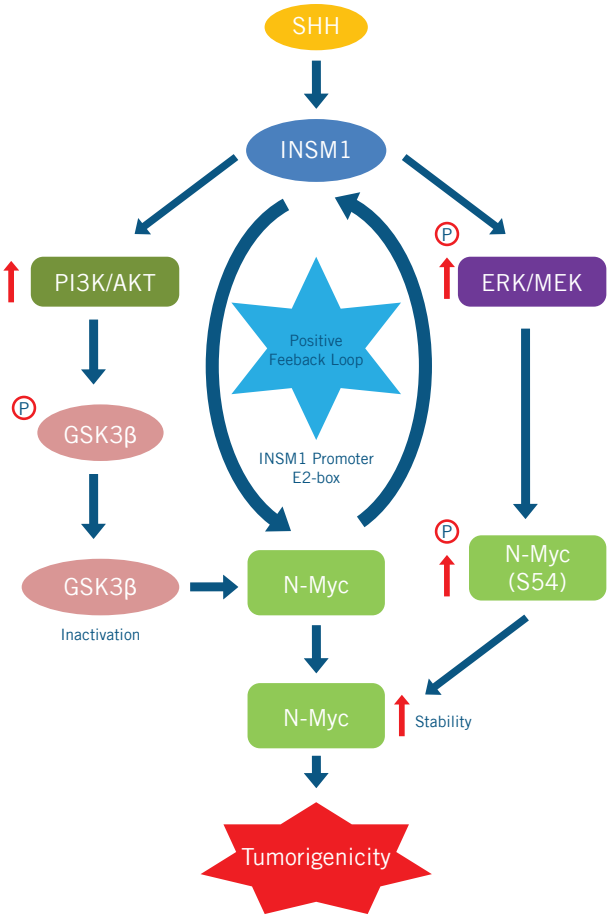
According to some studies, elevated INSM1 expression has been associated with aggressive tumor behavior and poorer prognosis in certain neuroendocrine tumors, indicating its potential as a prognostic biomarker.[4]

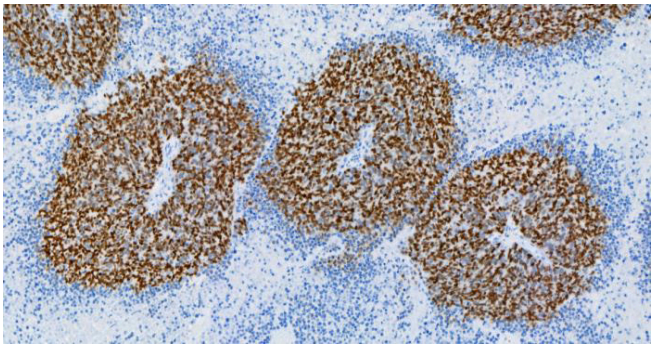
Some studies have shown a significant correlation between INSM1 levels and adverse clinical outcomes, especially in small cell lung cancers(SCLC). These studies may highlight its prognostic relevance in predicting disease progression and patient survival.[4]

In conclusion, many studies have shown that Insulinoma-associated protein 1 (INSM1) has emerged as a potentially promising tool in the fight against neuroendocrine tumors. With its high sensitivity and specificity for neuroendocrine cells, the INSM1 [BLR272L] antibody offers a valuable addition to the diagnostic immunohistochemistry (IHC) panel.[1] INSM1 expression not only may aid accurate tumor identification but also may hold potential as a prognostic biomarker.[2,4] Further research into INSM1's role in neuroendocrine tumor development and progression may lead to the development of novel therapeutic strategies to combat these cancers.

INSM1 Illustration / Photomicrograph

A diagram showing the mechanisms INSM1 is involved in and how they can promote tumorgenicity in NE tumors.[5]





Merkel cell carcinoma stained with INSM1 [BLR272L] antibody.

To learn more about the markers listed above, please visit our website at biocare.net or call 1-800-799-9499, option #3

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